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FILE 'MEDLINE' ENTERED AT 07:47:21 ON 11 SEP 2003

FILE 'CAPLUS' ENTERED AT 07:47:21 ON 11 SEP 2003
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FILE 'SCISEARCH' ENTERED AT 07:47:21 ON 11 SEP 2003
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FILE 'AGRICOLA' ENTERED AT 07:47:21 ON 11 SEP 2003

=> s gelatin
L1      111534 GELATIN

=> (molecular weight) (p) (300 kDa)
(MOLECULAR IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s (molecular weight) (p) (300 kDa)
L2          576 (MOLECULAR WEIGHT) (P) (300 KDA)

=> s l2 (p) l1
L3            8 L2 (P) L1

=> duplicate remove l3
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L3
L4              2 DUPLICATE REMOVE L3 (6 DUPLICATES REMOVED)

=> d l4 1-2 ibib abs

L4   ANSWER 1 OF 2     MEDLINE on STN                    DUPLICATE 1
ACCESSION NUMBER:    93273483     MEDLINE
DOCUMENT NUMBER:     93273483   PubMed ID: 8388862
TITLE:               Purification and characterization of a protease from
                     Porphyromonas gingivalis capable of degrading
                     salt-solubilized collagen.
AUTHOR:              Sojar H T; Lee J Y; Bedi G S; Genco R J
CORPORATE SOURCE:    Department of Oral Biology, State University of New York,
                     Buffalo 14214.
CONTRACT NUMBER:     DE04898 (NIDCR)
     DE07034 (NIDCR)
     DE08240 (NIDCR)
     +
SOURCE:              INFECTION AND IMMUNITY, (1993 Jun) 61 (6) 2369-76.
                     Journal code: 0246127. ISSN: 0019-9567.
PUB. COUNTRY:        United States
DOCUMENT TYPE:       Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:            English
FILE SEGMENT:        Priority Journals
ENTRY MONTH:         199306
ENTRY DATE:          Entered STN: 19930716
                     Last Updated on STN: 20000303
                     Entered Medline: 19930628
AB   An enzyme capable of hydrolyzing the substrate 4-
     phenylazobenzyloxycarbonyl-L-prolyl-leucyl-glycyl-prolyl-D-ar gin ine
     (pZ-peptide), pZ-peptidase, was purified from the oral bacterium
     Porphyromonas gingivalis. pZ-peptidase hydrolyzed salt-solubilized type I
     collagen from rat skin, rat plasma low-  ***molecular***  -  ***weight***
     kininogen, and transferrin at room temperature in the presence of calcium
     and dithiothreitol. pZ-peptidase did not cleave acid-soluble type I calf
     skin collagen, type V placental collagen, lysozyme, albumin, or human
     plasma fibrinogen.  Furthermore, the purified enzyme did not hydrolyze
     N-alpha-benzoyl-DL-Arg-p-nitroanilide, Gly-Pro-p-nitroanilide,
     N-p-tosyl-Gly-Pro-Arg-p-nitroanilide, N-p-tosyl-Gly-Pro-Lys-p-
     nitroanilide, azoalbumin, or azocasein.  Under reducing conditions, the
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native enzyme migrated as a single band at 120 kDa on sodium dodecyl sulfate (SDS)-polyacrylamide gel electrophoresis. However, when heated to 100 degrees C for 10 min in SDS under reducing conditions, the enzyme migrated as a major band at 50 kDa and a minor band at 60 kDa on SDS-polyacrylamide gel electrophoresis. Zymography using calf skin ***gelatin*** revealed the ***gelatin*** -cleaving activity of the enzyme as evidenced by a diffuse band in the range of 120 to ***300*** ***kDa*** under reducing conditions at room temperature, suggesting that this is the native form of the enzyme. However, incubation at 50 degrees C for 10 min under reducing conditions showed ***gelatin*** -cleaving activity at a distinct band of 60 kDa. A minimum temperature of 50 degrees C was required to dissociate the 60-kDa chain from the native complex in active form on ***gelatin*** zymography. The ability of the enzyme to cleave other proteins, including kininogen and transferrin, suggests that it has specificity for the Pro-X-Gly sequence found in several proteins, including collagen.

L4 ANSWER 2 OF 2 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 89278060 MEDLINE
DOCUMENT NUMBER: 89278060 PubMed ID: 2543659
TITLE: Purification and characterization of exudate gelatinases in the chronic-phase of carrageenin-induced inflammation in rats.
AUTHOR: Sakata K; Hoshino K; Nakagawa H
CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Toyama Medical and Pharmaceutical University.
SOURCE: JOURNAL OF BIOCHEMISTRY, (1989 Mar) 105 (3) 384-9. Journal code: 0376600. ISSN: 0021-924X.
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198907
ENTRY DATE: Entered STN: 19900309
Last Updated on STN: 20000303
Entered Medline: 19890718

AB Gelatinases have been purified from the exudate in the chronic-phase (day 7) of carrageenin-induced inflammation in rats. The day-7 exudate gelatinases gave two peaks on Sephadex G-150 gel filtration, the initial step of the purification. The ***molecular*** ***weights*** of the gelatinases corresponding to the two peaks were about ***300*** ***kDa*** (HMW fraction) and about 110 kDa (LMW fraction), respectively. The gelatinase in the HMW fraction has been purified to homogeneity; the purified gelatinase gave a single band corresponding to a ***molecular*** ***weight*** of 57 kDa on both SDS-polyacrylamide gel electrophoresis (PAGE) and SDS- ***gelatin*** PAGE. On the other hand, the gelatinase purified from the LMW fraction was found to consist of three species, with ***molecular*** ***weights*** of 66, 64, and 57 kDa, as judged on SDS- ***gelatin*** PAGE. Granulation tissue-derived fibroblasts in culture mainly produced the 64-kDa species, which was converted to a 57-kDa species on treatment with 4-amino-phenylmercuric acetate, while rat macrophages and polymorphonuclear leukocytes mainly secreted the 96-kDa species. These results suggest that exudate gelatinases are largely produced by fibroblasts in granulation tissue and that they bind to exudate proteins, resulting in the formation of complexes with ***molecular*** ***weights*** of about ***300*** ***kDa*** and about 110 kDa. The gelatinases purified from the HMW and LMW fractions are metalloproteinases, as judged from the results of inhibitor experiments. Both the gelatinases degraded ***gelatin*** , but showed to proteolytic activity toward alpha-casein or type I collagen. Type IV collagen was degraded at 35 degrees C by the gelatinases purified from the LMW fraction but not by that from the HMW fraction.

=> d his

(FILE 'HOME' ENTERED AT 07:47:03 ON 11 SEP 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 07:47:21 ON 11 SEP 2003
L1 111534 S GELATIN
L2 576 S (MOLECULAR WEIGHT) (P) (300 KDA)
L3 8 S L2 (P) L1
L4 2 DUPLICATE REMOVE L3 (6 DUPLICATES REMOVED)

=> s hydroxylation

```
L5       92753 HYDROXYLATION

=> s l1 (p) l5
L6          32 L1 (P) L5

=> duplicate remove l6
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L6
L7           21 DUPLICATE REMOVE L6 (11 DUPLICATES REMOVED)

=> s l7 (p) percent?
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L46 (P) PERCENT?'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L48 (P) PERCENT?'
L8           0 L7 (P) PERCENT?

=> s homogeneous
L9      354338 HOMOGENEOUS

=> s l9 (p) l1
L10         743 L9 (P) L1

=> s homogeneous mixture
L11        4622 HOMOGENEOUS MIXTURE

=> s l11 (a) l1
L12          0 L11 (A) L1

=> s homogeneous gelatin polypeptide
L13          0 HOMOGENEOUS GELATIN POLYPEPTIDE

=> s human gelatin
L14         71 HUMAN GELATIN

=> s human (a) gelatin
L15        103 HUMAN (A) GELATIN

=> s l14 or l15
L16        103 L14 OR L15

=> s bloom strength
L17         60 BLOOM STRENGTH

=> s l16 (p) l17
L18          0 L16 (P) L17

=> s heterogeneous
L19     287048 HETEROGENEOUS

=> s l16 (p) l19
L20          0 L16 (P) L19

=> s collagen (a) type
L21      45193 COLLAGEN (A) TYPE

=> s l16 (p) l21
L22          0 L16 (P) L21

=> s non-hydroxylated
L23        481 NON-HYDROXYLATED

=> s l16 (p) l23
L24          0 L16 (P) L23

=> s collagen construct
L25         57 COLLAGEN CONSTRUCT

=> s l16 (p) l25
L26          0 L16 (P) L25

=> s binding or encapsulant or stabilizing or (filming forming) or emusifier or thickening or gell
L27    3529767 BINDING OR ENCAPSULANT OR STABILIZING OR (FILMING FORMING) OR
               EMUSIFIER OR THICKENING OR GELLING OR COLLOIDAL OR (HARD GEL)
               OR (SOFT GEL)
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=> s (plasma expander) or adhesive[illegible] (colloidal volume replacement[illegible]r (graft coating) or (medica
L28     383251 (PLASMA EXPANDER) OR ADHESIVE OR (COLLOIDAL VOLUME R[illegible]LACEMENT)
               OR (GRAFT COATING) OR (MEDICAL SPONGE) OR (MEDICAL PLUG) OR
               STABILIZER OR MICROCARRIER

=> s (edible composition) or (protein supplement) or (fat substitute) or (nutritional supplement)
L29      14206 (EDIBLE COMPOSITION) OR (PROTEIN SUPPLEMENT) OR (FAT SUBSTITUTE)
               OR (NUTRITIONAL SUPPLEMENT) OR (EDIBLE COATING) OR (PHOTOGRAPHI
               C COMPOSITION) OR (COSMETIC COMPOSTION)

=> s (industrial composition) or (cell culture composition) or (vaccine stabilizer)
   4 FILES SEARCHED...
L30        245 (INDUSTRIAL COMPOSITION) OR (CELL CULTURE COMPOSITION) OR (VACCI
               NE STABILIZER)

=> s (l27 or l28 or l29 or l30) (p) l16
L31         13 (L27 OR L28 OR L29 OR L30) (P) L16

=> duplicate remove l31
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L31
L32            9 DUPLICATE REMOVE L31 (4 DUPLICATES REMOVED)

=> d l32 1-9 ibib abs

L32  ANSWER 1 OF 9     MEDLINE on STN                    DUPLICATE 1
ACCESSION NUMBER:    2000064889     MEDLINE
DOCUMENT NUMBER:     20064889   PubMed ID: 10598019
TITLE:               Regulation of gelatin-binding protein 28 (GBP28) gene
                     expression by C/EBP.
AUTHOR:              Saito K; Tobe T; Yoda M; Nakano Y; Choi-Miura N H; Tomita M
CORPORATE SOURCE:    Department of Physiological Chemistry, School of
                     Pharmaceutical Sciences, Showa University, Tokyo, Japan.
SOURCE:              BIOLOGICAL AND PHARMACEUTICAL BULLETIN, (1999 Nov) 22 (11)
                     1158-62.
                     Journal code: 9311984. ISSN: 0918-6158.
PUB. COUNTRY:        Japan
DOCUMENT TYPE:       Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:            English
FILE SEGMENT:        Priority Journals
ENTRY MONTH:         200001
ENTRY DATE:          Entered STN: 20000209
                     Last Updated on STN: 20000209
                     Entered Medline: 20000131
AB   We have previously reported the isolation of   ***human***
       ***gelatin***  -  ***binding***   protein 28 (GBP28) gene which is
     specifically expressed in adipose tissue.  The transcriptional activity of
     the flanking region of the GBP28 gene was examined by the transient
     transfection of promoter-luciferase reporter constructs into 3T3
     adipocytes and electrophoretic mobility shift assay.  This revealed the
     existence of a protein which binds to the 5'-flanking region of the GBP28
     gene in nuclear extracts from human adipose tissue, but not in nuclear
     extracts from mouse liver.  The C/EBP sites contained in this region are
     thought to take part in the regulation of GBP28 gene expression.

L32  ANSWER 2 OF 9  CAPLUS  COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:        1999:226503  CAPLUS
DOCUMENT NUMBER:         131:83758
TITLE:                   Organization of the gene for gelatin-binding protein
                         (GBP28)
AUTHOR(S):               Saito, Kiyomi; Tobe, Takashi; Minoshima, Shinsei;
                         Asakawa, Shuichi; Sumiya, Junichi; Yoda, Madoka;
                         Nakano, Yasuko; Shimizu, Nobuyoshi; Tomita, Motowo
CORPORATE SOURCE:        Department of Physiological Chemistry, School of
                         Pharmaceutical Sciences, Showa University, Tokyo,
                         Japan
SOURCE:                  Gene (1999), 229(1-2), 67-73
                         CODEN: GENED6; ISSN: 0378-1119
PUBLISHER:               Elsevier Science B.V.
DOCUMENT TYPE:           Journal
LANGUAGE:                English
AB   GBP28 is a novel human plasma gelatin-binding protein that is encoded by
     apM1 mRNA, expressed specifically in adipose tissue.  Three overlapping
     clones (two lambda clones and one BAC clone) contg. the human plasma
     gelatin-binding protein (GBP28) gene were isolated and characterized.  The
     GBP28 gene spans 16 kb and is composed of three exons from 18 bp to 4277
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bp in size with consensus spl[illegible] sites. The sizes of the two [illegible]trons were 0.8 and 12 kb, resp. The gen[illegible]s regulatory sequences contain [illegible]tative promoter elements, but no typical TATA box. The third exon of this gene contains a long 3'-untranslated sequence contg. three Alu repeats. The exon-intron organization of this gene was very similar to that of obese gene, encoding leptin. We also report the chromosome mapping of this gene by fluorescence in situ hybridization (FISH) using a genomic DNA fragment as a probe. The GBP28 gene was located on human chromosome 3q27. The nucleotide sequence data reported in this paper will appear in the DDBJ/EMBL/GenBank nucleotide sequence databases with the accession nos. AB012163, AB012164 or AB012165.

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1990:153999 CAPLUS
DOCUMENT NUMBER: 112:153999
TITLE: Novel hyperglycosylated weak gelatin-binding fibronectin from human fetal placenta. Fractionation of a high poly(N-acetyllactosamine) fragment by tomato lectin affinity chromatography
AUTHOR(S): Zhu, Betty C. R.; Laine, Roger A.
CORPORATE SOURCE: Dep. Biochem., Louisiana State Univ., Baton Rouge, LA, 70803, USA
SOURCE: European Journal of Biochemistry (1990), 188(1), 67-71
CODEN: EJBCAI; ISSN: 0014-2956
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A novel hyperglycosylated fraction of human term fetal placental fibronectin was detected by long-term affinity binding to gelatin-Sepharose. An 18-h batch-wise gelatin-binding step was necessary to obtain a very low-affinity binding fraction, characterized by esp. high N-acetylglucosamine and galactose content, and diffuse, poorly stained Coomassie bands on SDS/polyacrylamide electrophoretograms. The presence of a high proportion of long 7-10-kDa poly(N-actyllactosamine)-contg. N-linked carbohydrate chains was confirmed by their gel permeation behavior, susceptibility to endo-.beta.-galactosidase and by methylation anal. Previous results suggest that 4.5-7-kDa poly(N-acetyllactosamine) structures reduce the binding of fibronectin and its chymotryptic Ala260-Trp599 subdomain GB44 to gelatin (Zhu, B. C. R.; Laine, R. A., 1985). Based on a gradient of urea used to dissoc. gelatin-bound GB44, in the present study, fractions contg. the novel 7-10-kDa carbohydrates showed significantly weaker binding to gelatin. Weak gelatin-binding characteristics of this novel hyperglycosylated fraction suggest that extended poly(N-acetyllactosamine) N-linked chains can significantly weaken heterotropic binding functions of fetal glycoproteins. The combined properties of weak Coomassive staining and weak gelatin binding have caused the novel hyperglycosylated fibronectin to be overlooked in previous investigations.

L32 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1990:412106 CAPLUS
DOCUMENT NUMBER: 113:12106
TITLE: Freeze-dried hepatitis A vaccine containing amino acids and sugars as stabilizers
INVENTOR(S): Moritsugu, Yasuo; Totsuka, Atsuko; Sato, Seiya; Morita, Michio; Mizuno, Kiyosuke
PATENT ASSIGNEE(S): Denka Seiken K. K., Japan; Chiba Prefecture; Chemo-Sero-Therapeutic Research Institute
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01279843	A2	19891110	JP 1988-106749	19880428
JP 07061955	B4	19950705		

PRIORITY APPLN. INFO.: JP 1988-106749 19880428

AB Cultured hepatitis A virus is purified, inactivated, mixed with a ***stabilizer*** selected from amino acids (glycine, alanine, monosodium glutamate, arginine, lysine) and sugars (glucose, xylose, galactose, fructose, lactose, maltose, saccharose, mannitol, sorbitol, xylitol), and freeze dried to give a stable vaccine prepn. Thus, inactivated hepatitis A virus was mixed with arginine-HCl (0.1 wt./vol.%), Na glutamate (0.1

wt./vol.%), lactose (5 wt./vol.%), and sorbitol (1 wt./vol.%), filled into a vial, and freeze dried. A ***colloidal*** substance such as ***gelatin*** , ***human*** albumin, or dextran may be added.

L32 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1987:513072 CAPLUS
DOCUMENT NUMBER: 107:113072
TITLE: Gelatin-binding fragments of fibronectin as possible inhibitors of connective tissue cell proliferation
AUTHOR(S): Abakumova, O. Yu.; Kutsenko, N. G.; Mitina, V. Kh.; Panasyuk, A. F.; Orekhovich, V. N.
CORPORATE SOURCE: Inst. Biol. Med. Khim., Moscow, USSR
SOURCE: Doklady Akademii Nauk SSSR (1987), 294(4), 984-8 [Biochem.]
CODEN: DANKAS; ISSN: 0002-3264
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB A DNA synthesis inhibitor was detected in cultured human skin fibroblasts. This inhibitor was found to be a fragment of fibronectin, which was released by proteolytic cleavage of fibronectin. The inhibitor had high affinity for gelatin. The isolation, characterization, and possible functions of the inhibitor are considered.

L32 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1986:221060 CAPLUS
DOCUMENT NUMBER: 104:221060
TITLE: A weaker gelatin-binding affinity and increased glycosylation of amniotic fluid fibronectin than plasma fibronectin
AUTHOR(S): Yamaguchi, Yu; Isemura, Mamoru; Yosizawa, Zensaku; Kan, Mikio; Sato, Akira
CORPORATE SOURCE: Sch. Med., Tohoku Univ., Sendai, 980, Japan
SOURCE: International Journal of Biochemistry (1986), 18(5), 437-43
CODEN: IJBOBV; ISSN: 0020-711X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Human amniotic fluid fibronectin had different carbohydrate moieties from plasma fibronectin. Nearly 90% of glycopeptides released from amniotic fluid fibronectin was not bound by Con A-Sepharose, whereas 75% of glycopeptides from plasma fibronectin was bound. Amniotic fluid fibronectin showed a significantly lower gelatin-binding affinity than plasma fibronectin at 25.degree.. When the incubation temp. was lowered to 4.degree., no significant difference in this activity was found. The cell-attachment promoting activity of the 2 fibronectins was not significantly different.

L32 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1986:531713 CAPLUS
DOCUMENT NUMBER: 105:131713
TITLE: An enzyme-linked immunoassay for direct measurement of the gelatin-binding capacity of human plasma fibronectin
AUTHOR(S): Damas, P.; Adam, A.; Closset, J.; Calay, G.; Foidart, J. M.; Lamy, M.; Foidart, J.; Mahieu, P.
CORPORATE SOURCE: Dep. Anesthesiol., State Univ. Liege, Liege, 4020, Belg.
SOURCE: Journal of Immunological Methods (1986), 91(2), 205-11
CODEN: JIMMBG; ISSN: 0022-1759
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A new solid-phase EIA measuring the gelatin-binding capacity of plasma fibronectin was developed. This assay is based on the direct and high-affinity interaction between fibronectin and gelatin coated to polyvinyl chloride plates. The amt. of fibronectin bound to gelatin is then measured by sequential incubation with a specific rabbit anti-human fibronectin antiserum, with horseradish peroxidase-conjugated goat anti-rabbit IgG antibodies, and with substrate. The final degrdn. of the substrate is read at 492-650 nm in an ELISA processor. The assay allows the accurate detection of fibronectin concns. ranging from 1 to 20 .mu.g/mL, is inhibited by the addn. of gelatin to plasma, is highly reproducible, requires 100 .mu.L of plasma only, and has been fully automated. Significant linear correlations were noted between total antigenic fibronectin (measured by laser nephelometry) and fibronectin gelatin-binding capacity in plasma from 310 blood donors. Both parameters were higher in men than in women and significantly increased according to age. Dissocn. between immunoreactive fibronectin and fibronectin

gelatin-binding capacity was [redacted]d. in 2 polytraumatized patien[redacted] This EIA thus provides a new metho[redacted]o investigate functional alter[redacted]ons of the gelatin-binding domain of fibronectin in various pathol. conditions.

L32 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1984:63685 CAPLUS
DOCUMENT NUMBER: 100:63685
TITLE: Fluid-phase interaction between plasma fibronectin and gelatin determined by fluorescence polarization assay
AUTHOR(S): Forastieri, Hilda; Ingham, Kenneth C.
CORPORATE SOURCE: Plasma Derivatives Lab., Am. Red Cross Blood Serv., Bethesda, MD, 20814, USA
SOURCE: Archives of Biochemistry and Biophysics (1983), 227(2), 358-66
CODEN: ABBIA4; ISSN: 0003-9861
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To examine the interaction between human plasma and gelatin in soln., the latter was labeled with fluorescein isothiocyanate (FITC) whose fluorescence polarization (P) served as a sensitive indicator of the formation of sol. complexes. Changes in P were detected at fibronectin (Fn) concns. from <10-9M to >10-6M, at pH 7.3 and 25%. Fractionation of FITC-gelatin by exclusion chromatog. and titrn. of selected fractions with Fn revealed that affinity increased with increasing size. Both a high-mol.-wt. fraction of FITC-gelatin, (comprised of .beta. and .gamma. components) and a low-mol.-wt. fraction (comprised primarily of .alpha. chains) exhibited sigmoidal increases of P (i.e., apparent pos. cooperativity), with 50% satn. near 10-9 and 10-8M Fn, resp. By contrast, a 42-kilodalton chymotrypsin-generated Fn fragment, which retains the ability to adhere to gelatin-Sepharose, exhibited normal (noncooperative) binding to both gelatin fractions with Kd = 7 .times. 10-7M. In all cases, the increase in P was reversed by addn. of excess unlabeled gelatin or of urea. The interaction of Fn with FITC-gelatin provides a fast and sensitive detn. of Fn levels in plasma and other fluids. Interference caused by other proteins, such as albumin, which has an affinity for the fluorescein moiety, could be minimized by addn. of 1.0M NaCl, which did not affect the interaction between Fn and gelatin.

L32 ANSWER 9 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1983:293100 BIOSIS
DOCUMENT NUMBER: BA76:50592
TITLE: TRANSFORMATION ENHANCING ACTIVITY IN PLASMA OF TUMOR PATIENTS RELATIONSHIP WITH FIBRONECTIN FRAGMENTS.
AUTHOR(S): DE PETRO G; BARLATI S; VARTIO T; VAHERI A
CORPORATE SOURCE: DEP. VIROL., UNIV. HELSINKI, 00290 HELSINKI 29, FINL.
SOURCE: INT J CANCER, (1983) 31 (2), 157-162.
CODEN: IJCNAW. ISSN: 0020-7136.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB Human plasma cryoprecipitates (cryos) of tumor patients contain transformation-enhancing factors (TEF) able to promote morphological cell transformation in vitro. A similar activity is associated with proteolytic fibronectin fragments retaining the gelatin-binding site. Whether similarities exist between TEF found in cryos and the fibronectin fragments was studied. Of 14 TEF-positive tumor cryos tested, 13 (including carcinomas, leukemias, lymphomas and myelomas) retained their activity in the gelatin-binding fraction, and, in one, the activity was not recovered. In 1 case of myeloma, TEF activity was detected only in the gelatin-binding fraction and not in the starting cryo. In contrast, none of the TEF-negative control samples tested (obtained from healthy donors and patients affected by different nonmalignant diseases) showed any TEF activity in the gelatin-binding or -nonbinding fractions. The TEF-positive gelatin-binding fractions of tumor cryos were active even at the concentration of .apprx. 50 ng/ml. The presence of fibronectin in human plasma cryos was detected using immunoblotting. In the gelatin-binding fractions, fibronectin antigenicity was seen in the position of intact fibronectin subunits (MW = 220,000) and different fragments (MW = 50,000-200,000), while the gelatin-binding fractions contained a single antigenic polypeptide (MW 94,000). The TEF activity of cryo, and that of plasminolytic digest of purified plasma fibronectin, could be inhibited by fibronectin antibodies. The TEF activity present in tumor patient plasma cryoprecipitates apparently is related to gelatin-binding fragments of fibronectin.

=> d his

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      (FILE 'HOME' ENTERED AT 07:47[redacted] ON 11 SEP 2003)

      FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
      07:47:21 ON 11 SEP 2003
L1        111534 S GELATIN
L2           576 S (MOLECULAR WEIGHT) (P) (300 KDA)
L3             8 S L2 (P) L1
L4             2 DUPLICATE REMOVE L3 (6 DUPLICATES REMOVED)
L5         92753 S HYDROXYLATION
L6            32 S L1 (P) L5
L7            21 DUPLICATE REMOVE L6 (11 DUPLICATES REMOVED)
L8             0 S L7 (P) PERCENT?
L9        354338 S HOMOGENEOUS
L10          743 S L9 (P) L1
L11         4622 S HOMOGENEOUS MIXTURE
L12            0 S L11 (A) L1
L13            0 S HOMOGENEOUS GELATIN POLYPEPTIDE
L14           71 S HUMAN GELATIN
L15          103 S HUMAN (A) GELATIN
L16          103 S L14 OR L15
L17           60 S BLOOM STRENGTH
L18            0 S L16 (P) L17
L19       287048 S HETEROGENEOUS
L20            0 S L16 (P) L19
L21        45193 S COLLAGEN (A) TYPE
L22            0 S L16 (P) L21
L23          481 S NON-HYDROXYLATED
L24            0 S L16 (P) L23
L25           57 S COLLAGEN CONSTRUCT
L26            0 S L16 (P) L25
L27     3529767 S BINDING OR ENCAPSULANT OR STABILIZING OR (FILMING FORMING) OR
L28      383251 S (PLASMA EXPANDER) OR ADHESIVE OR (COLLOIDAL VOLUME REPLACEMEN
L29       14206 S (EDIBLE COMPOSITION) OR (PROTEIN SUPPLEMENT) OR (FAT SUBSTITU
L30         245 S (INDUSTRIAL COMPOSITION) OR (CELL CULTURE COMPOSITION) OR (VA
L31          13 S (L27 OR L28 OR L29 OR L30) (P) L16
L32           9 DUPLICATE REMOVE L31 (4 DUPLICATES REMOVED)

=> s (molecular weight)(p) kda
L33       63082 (MOLECULAR WEIGHT)(P) KDA

=> s l33 (p) l16
L34           0 L33 (P) L16

=> s l16 (p) (isolated or purified)
L35          13 L16 (P) (ISOLATED OR PURIFIED)

=> duplicate remove l35
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L35
L36            5 DUPLICATE REMOVE L35 (8 DUPLICATES REMOVED)

=> d l36 1-5 ibib abs

L36  ANSWER 1 OF 5     MEDLINE on STN                    DUPLICATE 1
ACCESSION NUMBER:    2002113136     MEDLINE
DOCUMENT NUMBER:     21671926   PubMed ID: 11812234
TITLE:               Recombinant expression and purification of an enzymatically
                     active cysteine proteinase of the protozoan parasite
                     Entamoeba histolytica.
AUTHOR:              Hellberg A; Nowak N; Leippe M; Tannich E; Bruchhaus I
CORPORATE SOURCE:    Bernhard Nocht Institute for Tropical Medicine, Bernhard
                     Nocht Strasse 74, 20359 Hamburg, Germany.
SOURCE:              PROTEIN EXPRESSION AND PURIFICATION, (2002 Feb) 24 (1)
                     131-7.
                     Journal code: 9101496. ISSN: 1046-5928.
PUB. COUNTRY:        United States
DOCUMENT TYPE:       Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:            English
FILE SEGMENT:        Priority Journals
ENTRY MONTH:         200210
ENTRY DATE:          Entered STN: 20020216
                     Last Updated on STN: 20021004
                     Entered Medline: 20021003
AB   Cysteine proteinases and in particular cysteine proteinase 5 (EhCP5) of
     Entamoeba histolytica are considered important for ameba pathogenicity.
     To study EhCP5 in more detail a protocol was elaborated to produce
```

considerable amounts of the enzyme in its active form. The protein was expressed in Escherichia coli as a histidine-tagged pro-enzyme and ***purified*** to homogeneity under denaturing conditions in the presence of guanidine-HCl using nickel affinity chromatography. Renaturation was performed by 100-fold dilution in a buffer containing reduced and oxidized thiols, which led to soluble but enzymatically inactive pro-enzyme. Further processing and activation was achieved in the presence of 10 mM DTT and 0.04% SDS at 37 degrees C. Recombinant enzyme (rEhCP5) was indistinguishable from native EhCP5 ***purified*** from E. histolytica lysates. Both runs in SDS-PAGE under reducing and nonreducing conditions at positions corresponding to 27 and 29 kDa, respectively, had the same pH optima and displayed similar specific activity against azocasein. Moreover, both enzymes were active against a broad spectrum of biological and synthetic substrates such as mucin, fibrinogen, collagen, human hemoglobin, bovine serum albumin, ***gelatin*** , ***human*** IgG, Z-Arg-Arg-pNA, and Z-Ala-Arg-Arg-pNA, but not against Z-Phe-Arg-pNA. The identity of rEhCP5 as a cysteine proteinase was confirmed by inhibition with specific cysteine proteinase inhibitors. In contrast, various compounds known to specifically inhibit aspartic, metallo, or serine proteinases had no effect on rEhCP5 activity.

L36 ANSWER 2 OF 5 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 1999081753 MEDLINE
DOCUMENT NUMBER: 99081753 PubMed ID: 9864226
TITLE: An extracellular protease of Streptococcus gordonii hydrolyzes type IV collagen and collagen analogues.
AUTHOR: Juarez Z E; Stinson M W
CORPORATE SOURCE: Center for Microbial Pathogenesis, School of Medicine and Biomedical Sciences, State University of New York at Buffalo 14214, USA.
CONTRACT NUMBER: RO1 DE05696 (NIDCR)
SOURCE: INFECTION AND IMMUNITY, (1999 Jan) 67 (1) 271-8. Journal code: 0246127. ISSN: 0019-9567.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199901
ENTRY DATE: Entered STN: 19990209
Last Updated on STN: 20000303
Entered Medline: 19990128

AB Streptococcus gordonii is a frequent cause of infective bacterial endocarditis, but its mechanisms of virulence are not well defined. In this study, streptococcal proteases were recovered from spent chemically defined medium (CDM) and fractionated by ammonium sulfate precipitation and by ion-exchange and gel filtration column chromatography. Three proteases were distinguished by their different solubilities in ammonium sulfate and their specificities for synthetic peptides. One of the enzymes cleaved collagen analogs Gly-Pro 4-methoxy-beta-naphthylamide, 2-furanacryloyl-Leu-Gly-Pro-Ala (FALGPA), and p-phenylazobenzyloxycarbonyl-Pro-Leu-Gly-Pro-Arg (pZ-peptide) and was released from the streptococci while complexed to peptidoglycan fragments. Treatment of this protease with mutanolysin reduced its 180- to 200-kDa mass to 98 kDa without loss of enzymatic activity. The ***purified*** protease cleaved bovine ***gelatin*** , ***human*** placental type IV collagen, and the Aalpha chain of fibrinogen but not albumin, fibronectin, laminin, or myosin. Enzyme activity was inhibited by phenylmethylsulfonyl fluoride, indicating that it is a serine-type protease. Maximum production of the 98-kDa protease occurred during growth of S. gordonii CH1 in CDM containing 0.075% total amino acids at pH 7.0 with minimal aeration. Higher initial concentrations of amino acids prevented the release of the protease without reducing cell-associated enzyme levels, and the addition of an amino acid mixture to an actively secreting culture stopped further enzyme release. The ***purified*** protease was stored frozen at -20 degreesC for several months or heated at 50 degreesC for 10 min without loss of activity. These data indicate that S. gordonii produces an extracellular gelatinase/type IV collagenase during growth in medium containing minimal concentrations of free amino acids. Thus, the extracellular enzyme is a potential virulence factor in the amino acid-stringent, thrombotic, valvular lesions of bacterial endocarditis.

L36 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1990:412106 CAPLUS
DOCUMENT NUMBER: 113:12106
TITLE: Freeze-dried hepatitis A vaccine containing amino

acids and sugars as stabilizers
INVENTOR(S): Moritsugu, Yasuo; Totsuka, Atsuko; Sato, Seiya; Morita, Michio; Mizuno, Kiyosuke
PATENT ASSIGNEE(S): Denka Seiken K. K., Japan; Chiba Prefecture; Chemo-Sero-Therapeutic Research Institute
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01279843	A2	19891110	JP 1988-106749	19880428
JP 07061955	B4	19950705		

PRIORITY APPLN. INFO.: JP 1988-106749 19880428

AB Cultured hepatitis A virus is ***purified*** , inactivated, mixed with a stabilizer selected from amino acids (glycine, alanine, monosodium glutamate, arginine, lysine) and sugars (glucose, xylose, galactose, fructose, lactose, maltose, saccharose, mannitol, sorbitol, xylitol), and freeze dried to give a stable vaccine prepn. Thus, inactivated hepatitis A virus was mixed with arginine-HCl (0.1 wt./vol.%), Na glutamate (0.1 wt./vol.%), lactose (5 wt./vol.%), and sorbitol (1 wt./vol.%), filled into a vial, and freeze dried. A colloidal substance such as ***gelatin*** , ***human*** albumin, or dextran may be added.

L36 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 1985:592802 CAPLUS
DOCUMENT NUMBER: 103:192802
TITLE: Characterization of protease production by a type-III group-B streptococcus
AUTHOR(S): Straus, David C.; Brown, Jacqueline G.
CORPORATE SOURCE: Health Sci. Cent., Texas Tech Univ., Lubbock, TX, USA
SOURCE: Current Microbiology (1985), 12(3), 127-34
CODEN: CUMIDD; ISSN: 0343-8651
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A type-III group-B streptococcus (S. agalactiae) ***isolated*** from a case of late-onset sepsis was examd. for protease prodn. In broth culture, extracellular proteolytic enzymes were not detected until the late exponential phase of growth with max. protease prodn. occurring during the stationary phase. Three distinct protease pools were ***isolated*** from the supernatant fluids of stationary-phase cultures, employing a combination of ion exchange chromatog. and gel filtration chromatog. One population of proteases (contg. 2 protease pools separable by gel filtration chromatog.) eluted from a DEAE-cellulose column at a NaCl gradient concn. of 0.15M while a second population eluted from the same material at a NaCl concn. of 0.35M. These protease pools varied in mol. wts. from .apprx.25,000 daltons to 160,000 daltons as detd. by gel filtration on Sephadex G-200. All 3 protease prepns. had pH optima of 8.0-9.0, and all were active against ***gelatin*** , ***human*** serum albumin, and casein, but were not active against elastin or collagen. In addn., all 3 protease prepns., completely inactivated ***purified*** type-III group-B streptococcal neuraminidase. The role of these proteases in the disease process caused by the type-III group-B streptococci must remain speculative at this time.

L36 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1959:41824 CAPLUS
DOCUMENT NUMBER: 53:41824
ORIGINAL REFERENCE NO.: 53:7518f-g
TITLE: Proteins as diluents for blood plasma
PATENT ASSIGNEE(S): Charles B. Knox Gelatine Co., Inc.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 945650		19560712	DE	

AB Protein derivs. are prepd. by the reaction of ***gelatin*** , ***human*** serum albumin, globulin, or blood protein with polycarboxyl anhydrides or chlorides in an aq. medium at a pH between 6 and 12. Subsequently, the derivs. are coagulated and ***purified*** . Succinic, citraconic, itaconic, aconitic, or maleic anhydride can be used

as anhydrides and succinic or fumaric chloride as chlorides.

```
=> s chang rebert/au
L37           0 CHANG REBERT/AU

=> s chang robert/au
L38          24 CHANG ROBERT/AU

=> s kivirkko kari/au
L39           0 KIVIRKKO KARI/AU

=> s neff thomas/au
L40           6 NEFF THOMAS/AU

=> s olson david/au
L41         132 OLSON DAVID/AU

=> s polarek james/au
L42           4 POLAREK JAMES/AU

=> s (l38 or l40 or l41 or l42) and l16
L43           0 (L38 OR L40 OR L41 OR L42) AND L16

=> d his

     (FILE 'HOME' ENTERED AT 07:47:03 ON 11 SEP 2003)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     07:47:21 ON 11 SEP 2003
L1       111534 S GELATIN
L2          576 S (MOLECULAR WEIGHT) (P) (300 KDA)
L3            8 S L2 (P) L1
L4            2 DUPLICATE REMOVE L3 (6 DUPLICATES REMOVED)
L5        92753 S HYDROXYLATION
L6           32 S L1 (P) L5
L7           21 DUPLICATE REMOVE L6 (11 DUPLICATES REMOVED)
L8            0 S L7 (P) PERCENT?
L9       354338 S HOMOGENEOUS
L10         743 S L9 (P) L1
L11        4622 S HOMOGENEOUS MIXTURE
L12           0 S L11 (A) L1
L13           0 S HOMOGENEOUS GELATIN POLYPEPTIDE
L14          71 S HUMAN GELATIN
L15         103 S HUMAN (A) GELATIN
L16         103 S L14 OR L15
L17          60 S BLOOM STRENGTH
L18           0 S L16 (P) L17
L19      287048 S HETEROGENEOUS
L20           0 S L16 (P) L19
L21       45193 S COLLAGEN (A) TYPE
L22           0 S L16 (P) L21
L23         481 S NON-HYDROXYLATED
L24           0 S L16 (P) L23
L25          57 S COLLAGEN CONSTRUCT
L26           0 S L16 (P) L25
L27     3529767 S BINDING OR ENCAPSULANT OR STABILIZING OR (FILMING FORMING) OR
L28      383251 S (PLASMA EXPANDER) OR ADHESIVE OR (COLLOIDAL VOLUME REPLACEMEN
L29       14206 S (EDIBLE COMPOSITION) OR (PROTEIN SUPPLEMENT) OR (FAT SUBSTITU
L30         245 S (INDUSTRIAL COMPOSITION) OR (CELL CULTURE COMPOSITION) OR (VA
L31          13 S (L27 OR L28 OR L29 OR L30) (P) L16
L32           9 DUPLICATE REMOVE L31 (4 DUPLICATES REMOVED)
L33       63082 S (MOLECULAR WEIGHT)(P) KDA
L34           0 S L33 (P) L16
L35          13 S L16 (P) (ISOLATED OR PURIFIED)
L36           5 DUPLICATE REMOVE L35 (8 DUPLICATES REMOVED)
L37           0 S CHANG REBERT/AU
L38          24 S CHANG ROBERT/AU
L39           0 S KIVIRKKO KARI/AU
L40           6 S NEFF THOMAS/AU
L41         132 S OLSON DAVID/AU
L42           4 S POLAREK JAMES/AU
L43           0 S (L38 OR L40 OR L41 OR L42) AND L16

=> s (L38 OR L40 OR L41 OR L42) AND L1
L44           2 (L38 OR L40 OR L41 OR L42) AND L1
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=> duplicate remove l44
PROCESSING COMPLETED FOR L44
L45             2 DUPLICATE REMOVE L44 (0 DUPLICATES REMOVED)

=> d l45 1-2 ibib abs

L45  ANSWER 1 OF 2  BIOSIS  COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER:   2002:489142  BIOSIS
DOCUMENT NUMBER:    PREV200200489142
TITLE:              Methods for the production of   ***gelatin***   and
                    full-length triple helical collagen in recombinant cells.
AUTHOR(S):          Olsen, David R.;   ***Chang, Robert***  ; McMullin, Hugh;
                    Hitzeman, Ronald A.; Chisholm, George
                    ASSIGNEE: Cohesion Technologies, Inc.; Genotypes, Inc.
PATENT INFORMATION: US 6428978 August 06, 2002
SOURCE:             Official Gazette of the United States Patent and Trademark
                    Office Patents, (Aug. 6, 2002) Vol. 1261, No. 1, pp. No
                    Pagination. http://www.uspto.gov/web/menu/patdata.html.
                    e-file.
                    ISSN: 0098-1133.
DOCUMENT TYPE:      Patent
LANGUAGE:           English
AB   Methods are disclosed for simplified recombinant production of fibrillar
     collagens. DNAs encoding fibrillar collagen monomers lacking the N
     propeptide, the C propeptide, or both propeptides are introduced into
     recombinant host cells and expressed. Trimeric collagen is recovered from
     the recombinant host cells.

L45  ANSWER 2 OF 2  BIOSIS  COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER:   2002:434852  BIOSIS
DOCUMENT NUMBER:    PREV200200434852
TITLE:              Recombinant   ***gelatin***   and full-length triple
                    helical collagen.
AUTHOR(S):          Olsen, David R.;   ***Chang, Robert (1)***  ; McMullin,
                    Hugh; Hitzeman, Ronald A.; Chisholm, George
CORPORATE SOURCE:   (1) Hillsborough, CA USA
                    ASSIGNEE: Cohesion Technologies, Inc.; Genotypes, Inc.,
                    Pacifica, CA, USA
PATENT INFORMATION: US 6413742 July 02, 2002
SOURCE:             Official Gazette of the United States Patent and Trademark
                    Office Patents, (July 2, 2002) Vol. 1260, No. 1, pp. No
                    Pagination. http://www.uspto.gov/web/menu/patdata.html.
                    e-file.
                    ISSN: 0098-1133.
DOCUMENT TYPE:      Patent
LANGUAGE:           English
AB   Methods are disclosed for simplified recombinant production of fibrillar
     collagens. DNAs encoding fibrillar collagen monomers lacking the N
     propeptide, the C propeptide, or both propeptides are introduced into
     recombinant host cells and expressed. Trimeric collagen is recovered from
     the recombinant host cells.


=> d his

     (FILE 'HOME' ENTERED AT 07:47:03 ON 11 SEP 2003)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     07:47:21 ON 11 SEP 2003
L1          111534 S GELATIN
L2             576 S (MOLECULAR WEIGHT) (P) (300 KDA)
L3               8 S L2 (P) L1
L4               2 DUPLICATE REMOVE L3 (6 DUPLICATES REMOVED)
L5           92753 S HYDROXYLATION
L6              32 S L1 (P) L5
L7              21 DUPLICATE REMOVE L6 (11 DUPLICATES REMOVED)
L8               0 S L7 (P) PERCENT?
L9          354338 S HOMOGENEOUS
L10            743 S L9 (P) L1
L11           4622 S HOMOGENEOUS MIXTURE
L12              0 S L11 (A) L1
L13              0 S HOMOGENEOUS GELATIN POLYPEPTIDE
L14             71 S HUMAN GELATIN
L15            103 S HUMAN (A) GELATIN
L16            103 S L14 OR L15
L17             60 S BLOOM STRENGTH
L18              0 S L16 (P) L17
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L19       287048 S HETEROGENEOUS
L20            0 S L16 (P) L19
L21        45193 S COLLAGEN (A) TYPE
L22            0 S L16 (P) L21
L23          481 S NON-HYDROXYLATED
L24            0 S L16 (P) L23
L25           57 S COLLAGEN CONSTRUCT
L26            0 S L16 (P) L25
L27      3529767 S BINDING OR ENCAPSULANT OR STABILIZING OR (FILMING FORMING) OR
L28       383251 S (PLASMA EXPANDER) OR ADHESIVE OR (COLLOIDAL VOLUME REPLACEMEN
L29        14206 S (EDIBLE COMPOSITION) OR (PROTEIN SUPPLEMENT) OR (FAT SUBSTITU
L30          245 S (INDUSTRIAL COMPOSITION) OR (CELL CULTURE COMPOSITION) OR (VA
L31           13 S (L27 OR L28 OR L29 OR L30) (P) L16
L32            9 DUPLICATE REMOVE L31 (4 DUPLICATES REMOVED)
L33        63082 S (MOLECULAR WEIGHT)(P) KDA
L34            0 S L33 (P) L16
L35           13 S L16 (P) (ISOLATED OR PURIFIED)
L36            5 DUPLICATE REMOVE L35 (8 DUPLICATES REMOVED)
L37            0 S CHANG REBERT/AU
L38           24 S CHANG ROBERT/AU
L39            0 S KIVIRKKO KARI/AU
L40            6 S NEFF THOMAS/AU
L41          132 S OLSON DAVID/AU
L42            4 S POLAREK JAMES/AU
L43            0 S (L38 OR L40 OR L41 OR L42) AND L16
L44            2 S (L38 OR L40 OR L41 OR L42) AND L1
L45            2 DUPLICATE REMOVE L44 (0 DUPLICATES REMOVED)

=> log y
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                  ENTRY     SESSION
FULL ESTIMATED COST                               221.25      221.46

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)      SINCE FILE      TOTAL
                                                  ENTRY     SESSION
CA SUBSCRIBER PRICE                                -6.51       -6.51

STN INTERNATIONAL LOGOFF AT 08:18:10 ON 11 SEP 2003
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FILE 'MEDLINE' ENTERED AT 08:27:15 11 SEP 2003

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FILE 'SCISEARCH' ENTERED AT 08:27:15 ON 11 SEP 2003
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FILE 'AGRICOLA' ENTERED AT 08:27:15 ON 11 SEP 2003

=> s recombinant gelatin
L1          19 RECOMBINANT GELATIN

=> s recombinant human gelatin
L2           1 RECOMBINANT HUMAN GELATIN

=> s l1 or l2
L3          20 L1 OR L2

=> duplicate remove l3
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L3
L4           13 DUPLICATE REMOVE L3 (7 DUPLICATES REMOVED)

=> d l4 1-13 ibib abs

L4   ANSWER 1 OF 13  CAPLUS  COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:         2003:495385  CAPLUS
TITLE:                      ***Recombinant***     ***gelatin***   and collagen
AUTHOR(S):                de Wolf, F. A.
CORPORATE SOURCE:         Bioconversion Department, Agrotechnological Research
                          Institute ATO B.V., Wageningen, 6700 AA, Neth.
SOURCE:                   Progress in Biotechnology (2003), 23(Industrial
                          Proteins in Perspective), 190-194, 215-216
                          CODEN: PBITE3; ISSN: 0921-0423
PUBLISHER:                Elsevier Science B.V.
DOCUMENT TYPE:            Journal; General Review
LANGUAGE:                 English
AB   A review discusses the recombinant prodn. of collagen and gelatin.  The
     development of bacterial prodn. systems for recombinant collagen-like
     polypeptides is also tackled.
REFERENCE COUNT:          57    THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4   ANSWER 2 OF 13  CAPLUS  COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:         2002:693122  CAPLUS
DOCUMENT NUMBER:          137:237689
TITLE:                      ***Recombinant***     ***gelatin***  -like proteins
                          for use as plasma expanders
INVENTOR(S):              Bouwstra, Jan Bastiaan; Toda, Yuzo
PATENT ASSIGNEE(S):       Fuji Photo Film B.V., Neth.
SOURCE:                   Eur. Pat. Appl., 14 pp.
                          CODEN: EPXXDW
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     --------------    ----  --------       ---------------  --------
     EP 1238675         A1   20020911       EP 2001-200837   20010306
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     WO 2002070000      A1   20020912       WO 2002-NL147    20020306
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
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LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: EP 2001-200837 A 20010306
AB The invention relates to compns. suitable for plasma substitution comprising as a plasma expander a ***recombinant*** ***gelatin*** -like protein. Characteristic is that the gelatin-like protein essentially is free of hydroxyproline. This absence of hydroxyproline prevents the compn. from gelling and thus allows the use of high-mol. wt. proteins in order to establish a suitable colloid osmotic pressure. Specific advantage of the gelatin-like proteins is that these avoid the risk of anaphylactic shock that exists in conjunction with the use of com. available prepns.
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 13 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 2002:434852 BIOSIS
DOCUMENT NUMBER: PREV200200434852
TITLE: ***Recombinant*** ***gelatin*** and full-length triple helical collagen.
AUTHOR(S): Olsen, David R.; Chang, Robert (1); McMullin, Hugh; Hitzeman, Ronald A.; Chisholm, George
CORPORATE SOURCE: (1) Hillsborough, CA USA
ASSIGNEE: Cohesion Technologies, Inc.; Genotypes, Inc., Pacifica, CA, USA
PATENT INFORMATION: US 6413742 July 02, 2002
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (July 2, 2002) Vol. 1260, No. 1, pp. No Pagination. http://www.uspto.gov/web/menu/patdata.html. e-file.
ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
AB Methods are disclosed for simplified recombinant production of fibrillar collagens. DNAs encoding fibrillar collagen monomers lacking the N propeptide, the C propeptide, or both propeptides are introduced into recombinant host cells and expressed. Trimeric collagen is recovered from the recombinant host cells.

L4 ANSWER 4 OF 13 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003) on STN
ACCESSION NUMBER: 2002:31684 AGRICOLA
DOCUMENT NUMBER: CAT11118434
TITLE: ***Recombinant*** ***gelatin*** and collagen from methylotrophic yeasts.
AUTHOR(S): Bruin, Eric C. de.
AVAILABILITY: DNAL (DISS F2002009)
SOURCE: 2002? 109 p. : ill. ; 24 cm
Publisher: [Wageningen : s.n., 2002?]
ISBN: 905808583X.
NOTE: "Stellingen" inserted.
Thesis (doctoral)--Wageningen Universiteit, 2002.
Includes bibliographical references (p. 95-104).
Voorword and summary in Dutch.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Bibliography; Dissertation; (MONOGRAPH)
FILE SEGMENT: Non-U.S. Imprint other than FAO
LANGUAGE: English
SUMMARY LANGUAGE: Dutch

L4 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:20642 CAPLUS
DOCUMENT NUMBER: 139:171154
TITLE: Functions of gelatin in imaging materials
AUTHOR(S): Toda, Yuzo; Mori, Fuyuhiko; Bouwstra, Jan
CORPORATE SOURCE: Tilburg Research Laboratory, Fuji Photo Film B. V., Tilburg, 5000 LJ, Neth.
SOURCE: Nippon Shashin Gakkaishi (2002), 65(6), 381-389
CODEN: NSGKAP; ISSN: 0369-5662
PUBLISHER: Nippon Shashin Gakkai

DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review. Functions of gelatin in imaging materials of present and future are overviewed. Chapter 1 reviews present technologies' state of the art and limitations. While main focus is put on photog. materials and their manufg., a brief glance was paid on new application areas. Chapter 2 discusses about future technologies around gelatin in imaging materials and their possibilities. A few novel aspects for gelatin are reviewed in this chapter, namely enzymically hydrolyzed gelatins, bio-genetically synthesized ***recombinant*** ***gelatins*** , and chem. modified hybrid gelatins.
REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 13 MEDLINE on STN DUPLICATE 1
ACCESSION NUMBER: 2003183567 MEDLINE
DOCUMENT NUMBER: 22588383 PubMed ID: 12702332
TITLE: Endogenous prolyl 4-hydroxylation in Hansenula polymorpha and its use for the production of hydroxylated ***recombinant*** ***gelatin*** .
AUTHOR: de Bruin Eric C; Werten Marc W T; Laane Colja; de Wolf Frits A
CORPORATE SOURCE: Agrotechnological Research Institute, Wageningen, The Netherlands.
SOURCE: FEM Yeast Res, (2002 Jan) 1 (4) 291-8.
Journal code: 101085384. ISSN: 1567-1356.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200306
ENTRY DATE: Entered STN: 20030419
Last Updated on STN: 20030614
Entered Medline: 20030613
AB Several yeast systems have recently been developed for the recombinant production of gelatin and collagen. Amino acid sequence-specific prolyl 4-hydroxylation is essential for the gel-forming capacity of gelatin and for the proper folding of (pro)collagen. This post-translational modification is generally considered to be absent in microbial eukaryotic systems and therefore co-expression of heterologous (human or animal) prolyl 4-hydroxylase would be required. However, we found that the well-known protein expression host Hansenula polymorpha unexpectedly does have the endogenous capacity for prolyl 4-hydroxylation. Without co-expression of a heterologous prolyl 4-hydroxylase, both an endogenous collagen-like protein and a heterologously expressed collagen fragment were found to be sequence-specifically hydroxylated.

L4 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:360174 CAPLUS
DOCUMENT NUMBER: 134:365701
TITLE: ***Recombinant*** ***gelatins*** derived from type I collagen .alpha.1 chain, and pharmaceutical applications in vaccines thereof
INVENTOR(S): Chang, Robert C.; Kivirikko, Kari I.; Neff, Thomas B.; Olsen, David R.; Polarek, James W.
PATENT ASSIGNEE(S): Fibrogen, Inc., USA
SOURCE: PCT Int. Appl., 130 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001034801	A2	20010517	WO 2000-US30843	20001110
WO 2001034801	A3	20020131		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1232262	A2	20020821	EP 2000-978469	20001110

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2003513988	T2	20030415	JP 2001-537497		20001110
US 2003064074	A1	20030403	US 2002-232175		20020830
PRIORITY APPLN. INFO.:			US 1999-165114P	P	19991112
			US 2000-204437P	P	20000515
			US 2000-710249	B1	20001110
			WO 2000-US30843	W	20001110

AB The present invention relates to vaccines comprising ***recombinant*** ***gelatin*** , to methods of producing and using such vaccines, and to vaccination kits. The present invention relates to ***recombinant*** ***gelatins*** and compns. thereof, and methods of producing and using the same. Human gelatins with discrete fragments of the .alpha.1(I) chain of human type I collagen is produced using a yeast multi-gene recombinant expression system. Specific fragments of cDNA for .alpha.1(I) chain from human type I collagen is cloned for the expression in Pichia pastoris which is also transformed with genes for the .alpha. or .beta. subunit of human prolyl 4-hydroxylase, which is used to improve the stability of the ***recombinant*** ***gelatins*** . Well-defined, highly homogenous gelatin fragments ranging in size from 6-65 kDa are produced, which can support cell attachment activity, have lower level endotoxin contamination, and are proteolytically more stable. The peptide profile of thermal, acid, and enzymic hydrolysis anal., and antigenicity of these ***recombinant*** ***gelatins*** are studied. This presents unsurpassed flexibility in terms of the size and biophys. properties of the gelatin that can be used for pharmaceutical or industrial applications.

L4 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:360038 CAPLUS
DOCUMENT NUMBER: 134:362258
TITLE: Animal collagens and their use for gelatins preparation in transgenic plants
INVENTOR(S): Bell, Marcum P.; Neff, Thomas B.; Polarek, James W.; Seeley, Todd W.
PATENT ASSIGNEE(S): Fibrogen, Inc., USA
SOURCE: PCT Int. Appl., 168 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001034647	A2	20010517	WO 2000-US30792	20001110
WO 2001034647	A3	20011206		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1232182	A2	20020821	EP 2000-978456		20001110

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

BR 2000015507	A	20021022	BR 2000-15507		20001110
JP 2003513659	T2	20030415	JP 2001-537358		20001110
PRIORITY APPLN. INFO.:			US 1999-439058	A	19991112
			US 2000-709700	A	20001110
			WO 2000-US30792	W	20001110

AB The present invention provides animal collagens and gelatins and compns. thereof, and methods of producing the same. Various forms of collagen gene have been cloned and sequenced from bovine and porcine, which include Type I .alpha.1 chain, Type III .alpha.1 chain and Type I .alpha.2 chain. These procollagen genes can be used for to prep. gelatins in transgenic plants by pharmaceutic and industrial applications.

L4 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:360037 CAPLUS
DOCUMENT NUMBER: 134:362228
TITLE: ***Recombinant*** ***gelatins*** derived from type I collagen .alpha.1 chain, and pharmaceutical and industrial applications thereof

INVENTOR(S): Chang, Robert C.; Kivirikko, Kari I.; Neff, Thomas B.; Olsen, Da[redacted] R.; Polarek, James W.
PATENT ASSIGNEE(S): Fibrogen, Inc., USA
SOURCE: PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001034646	A2	20010517	WO 2000-US30791	20001110
WO 2001034646	A3	20011206		
WO 2001034646	C2	20021121		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1232181	A2	20020821	EP 2000-978455	20001110
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003516730	T2	20030520	JP 2001-537357	20001110
BR 2000015508	A	20030610	BR 2000-15508	20001110
US 2003064074	A1	20030403	US 2002-232175	20020830

PRIORITY APPLN. INFO.:
US 1999-165114P P 19991112
US 2000-204437P P 20000515
US 2000-710249 B1 20001110
WO 2000-US30791 W 20001110

AB The present invention relates to ***recombinant*** ***gelatins*** and compns. thereof, and methods of producing and using the same. Human gelatins with discrete fragments of the .alpha.1(I) chain of human type I collagen is produced using a yeast multi-gene recombinant expression system. Specific fragments of cDNA for .alpha.1(I) chain from human type I collagen is cloned for the expression in Pichia pastoris which is also transformed with genes for the .alpha. or .beta. subunit of human prolyl 4-hydroxylase, which is used to improve the stability of the ***recombinant*** ***gelatins*** . Well-defined, highly homogenous gelatin fragments ranging in size from 6-65 kDa are produced, which can support cell attachment activity, have lower level endotoxin contamination, and are proteolytically more stable. The peptide profile of thermal, acid, and enzymic hydrolysis anal., and antigenicity of these ***recombinant*** ***gelatins*** are studied. This presents unsurpassed flexibility in terms of the size and biophys. properties of the gelatin that can be used for pharmaceutical or industrial applications.

L4 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:441507 CAPLUS
DOCUMENT NUMBER: 133:81505
TITLE: Silver halide photographic emulsion containing ***recombinant*** ***gelatin*** -like protein
INVENTOR(S): De Wolf, Anton; Werten, Marc Willem Theodoor; Wisselink, Hendrik Wouter; Jansen-Van Den Bosch, Tanja Jacoba; Toda, Yuzo; Van Heerde, Georg Valentino; Bouwstra, Jan Bastiaan
PATENT ASSIGNEE(S): Fuji Photo Film B.V., Neth.
SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1014176	A2	20000628	EP 1999-204382	19991217
EP 1014176	A3	20000802		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6150081	A	20001121	US 1998-219849	19981223

PRIORITY APPLN. INFO.:
US 1998-219849 A 19981223

NL 1997-1007908 A 19971224

AB The invention provides a nonn[redacted]ral gelatin-like protein prepo[redacted]y genetic engineering and having a mol. wt. of from about 2500 to about 100,000 and an amino acid sequence comprising more than 4 different amino acids. The invention also provides a tabular silver halide photog. emulsion contg. the gelatin-like protein as a peptizer. Tabular grains account for more than 75% of the total grain-projected area of the photog. emulsion, and the silver halide grains are nucleated in the presence of a nucleation peptizer and thereafter grown in the presence of a growth peptizer, wherein either the nucleation peptizer or the growth peptizer can be the ***recombinant*** ***gelatin*** -like protein.

L4 ANSWER 11 OF 13 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 1999387091 MEDLINE
DOCUMENT NUMBER: 99387091 PubMed ID: 10455232
TITLE: High-yield secretion of ***recombinant*** ***gelatins*** by Pichia pastoris.
AUTHOR: Werten M W; van den Bosch T J; Wind R D; Mooibroek H; de Wolf F A
CORPORATE SOURCE: Agrotechnological Research Institute (ATO-DLO), Bornsesteeg 59, 6708 PD Wageningen, The Netherlands..
m.w.t.werten@ato.dlo.nl
SOURCE: YEAST, (1999 Aug) 15 (11) 1087-96.
Journal code: 8607637. ISSN: 0749-503X.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199910
ENTRY DATE: Entered STN: 19991101
Last Updated on STN: 19991101
Entered Medline: 19991020

AB Recombinant non-hydroxylated gelatins based on mouse type I and rat type III collagen sequences were secreted from the methylotrophic yeast Pichia pastoris, using the Saccharomyces cerevisiae alpha-mating factor prepro signal. Proteolytic degradation could be minimized to a large extent by performing fermentations at pH 3.0 and by adding casamino acids to the medium, even though gelatin is extremely susceptible to proteolysis due to its open, unfolded structure. Proteolytic cleavage at specific mono-arginylic sites, by a putative Kex2-like protease, could be successfully abolished by site-directed mutagenesis of these sites. Production levels as high as 14.8 g/l clarified both were obtained, using multicopy tranformants. To our knowledge, this represents the highest level of heterologous protein secretion reported to date for P. pastoris. Copyright 1999 John Wiley & Sons, Ltd.

L4 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:299673 CAPLUS
DOCUMENT NUMBER: 122:89288
TITLE: The use of gelatin as a vehicle for drug and peptide delivery
AUTHOR(S): Di Silvio, L.; Courteney-Harris, R. G.; Downes, S.
CORPORATE SOURCE: Institute Orthopedics, Royal National Orthopedic Hospital Trust, Stanmore, Middlesex, HA7 4LP, UK
SOURCE: Journal of Materials Science: Materials in Medicine (1994), 5(11), 819-23
CODEN: JSMMEL; ISSN: 0957-4530
PUBLISHER: Chapman & Hall
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Gelatin, a naturally occurring polymer, has been investigated as a vehicle for drug delivery in two different delivery systems: microspheres and as a coating on titanium implants. The gelatin was loaded with recombinant human growth hormone (hGH) which was dispersed within the polymer matrix prior to crosslinking; it was then made into microspheres or coated onto the implants. The release of hGH was monitored in vitro using an ELISA system. The effects of pH on the swelling kinetics and the phys. properties of the loaded gelatin in the microsphere system were studied. In addn., the effect of ultrasound on the microspheres was investigated as a possible method for controlling the rate of release of hGH, it was demonstrated that exposure to ultrasound significantly increased hGH release. Biocompatibility of the gelatin was detd. using both primary human (HOB) and rabbit (ROB) osteoblast-like cells in culture.

L4 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1989:237048 CAPLUS
DOCUMENT NUMBER: 110:237048

TITLE: In vivo effects of recombinant interferon alpha A/D incorporated in gelatin microspheres on murine tumor cell growth

AUTHOR(S): Tabata, Yasuhiko; Uno, Kazuko; Muramatsu, Shigeru; Ikada, Yoshito

CORPORATE SOURCE: Res. Cent. Med. Polym. Biomater., Kyoto Univ., Kyoto, 606, Japan

SOURCE: Japanese Journal of Cancer Research (1989), 80(4), 387-93
CODEN: JJCREP; ISSN: 0910-5050

DOCUMENT TYPE: Journal

LANGUAGE: English

AB I.p. injections of gelatin microspheres contg. a very small amt. of recombinant human interferon .alpha. A/D (A/D-IFN) (IFN-microspheres) plus free A/D-IFN improved the survival of mice bearing ascitic Meth A-R1 cells isolated as IFN-resistant cells under in vitro conditions. The dose of free A/D-IFN in one injection was 10,000 IU, which was insufficient by itself for manifesting in vivo antitumor activity. In these mice, in vivo R1 cell growth was suppressed and macrophage recruitment was enhanced in comparison with mice receiving other control agents. Administration of IFN-microspheres alone was also effective but less than that of IFN-microspheres plus free A/D-IFN. Peritoneal macrophages obtained from normal or R1-bearing mice receiving i.p. injection of IFN-microspheres with or without free A/D-IFN were activated to inhibit the in vitro growth of R1 cells. The intratumoral injection of IFN-microspheres strongly inhibited the growth of solid R1 tumors. I.v. injection of IFN-microspheres was effective in preventing the pulmonary metastasis of B16 melanoma cells. Thus, the IFN-microsphere is much more effective against tumors than free A/D-IFN.

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(FILE 'HOME' ENTERED AT 08:26:25 ON 11 SEP 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 08:27:15 ON 11 SEP 2003

L1 19 S RECOMBINANT GELATIN
L2 1 S RECOMBINANT HUMAN GELATIN
L3 20 S L1 OR L2
L4 13 DUPLICATE REMOVE L3 (7 DUPLICATES REMOVED)

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	38.78	39.20

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-5.86	-5.86

STN INTERNATIONAL LOGOFF AT 08:28:47 ON 11 SEP 2003